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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,321	05/04/2006	Takenori Yoshizawa	1248-0870PUS1	5572

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EXAMINER

KRYCINSKI, STANTON L

ART UNIT	PAPER NUMBER
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4174

NOTIFICATION DATE	DELIVERY MODE
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04/02/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/578,321	YOSHIZAWA, TAKENORI	
	Examiner	Art Unit	
	Stanton L. Krycinski	4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/18/2007, 8/3/06, 5/4/06</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. Figures 22-27 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Reference sign "205" of Figure 27 as stated on page 1.

Reference signs "11a, 11i, 11b, and 11j" of Figure 2 as stated on page 18.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

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any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it is longer than 150 words in length. Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities:

Line 1 of page 17, "6" should read --2--.

Line 17 of page 29, "transport" should read --transported--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1-6, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Boardman et al. (US Patent No. 5,492,223).

8. In regards to Claim 1, Boardman et al. teaches a stackable carrying tray (10', Figure 2) for horizontally placing a semiconductor device (including the substrate) comprising an upper contact section (18, Figure 2) and lower contact section (20, Figure 2). A first carrying tray (10') is stacked on top of another carrying tray via an interlocking nest (16, Figure 2). The interlocking nest (16) insures the stackable carrying trays are aligned (Column 4, Line 42-56), which keeps the center of gravity of each tray aligned vertically.

9. In regards to Claim 2, Boardman et al. teaches a stackable carrying tray (10', Figure 2) for horizontally placing a semiconductor device (including the substrate) comprising an upper contact section (18, Figure 2) and lower contact section (20, Figure 2). The upper contact section (18) is inclined outwardly, and the lower inclined section (20) is inclined inwardly as shown in Figure 2.

10. In regards to Claim 3, Boardman et al. teaches a stackable carrying tray with a trough (19, Figure 2) separating a pedestal (15, Figure 2) from the outer peripheral sidewalls (edges) (17, Figure 2). The upper and lower contact sections (18, 20, Figure 2) are disposed on the peripheral sidewalls (edges) of the carrying tray.

11. In regards to Claim 4, Boardman et al. teaches a stackable carrying tray with the upper contact section (18) and the lower contact section (20) having the inclined section on the entire surface as shown in Figure 2 (Column 7, Line 48-49).

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12. In regards to Claim 5, Boardman et al. teaches an upper contact section (18", Figure 7) having an upper inclined section on a portion including the inner edge of the upper contact portion, and the lower contact portion (20", Figure 7) has an inclined surface corresponding to an edge on which the upper inclined section is disposed, as an alternative to having a continuous inclined surface on the contact surface (18, Figure 2) (Column 7, Line 48-49).

13. In regards to Claim 6, Boardman et al. teaches at least one of the upper and lower inclined sections (18, 20, Figure 2) are inclined in a plane manner (Column 4, Line 36-37).

14. In regards to Claim 11, Boardman et al. teaches a stackable carrying tray with the upper contact section (18) and the lower contact section (20) having the inclined section on the entire surface as shown in Figure 2 (Column 7, Line 48-49).

15. In regards to Claim 12, Boardman et al. teaches an upper contact section (18", Figure 7) having an upper inclined section on a portion including the inner edge of the upper contact portion, and the lower contact portion (20", Figure 7) has an inclined surface corresponding to an edge on which the upper inclined section is disposed, as an alternative to having a continuous inclined surface on the contact surface (18, Figure 2) (Column 7, Line 48-49).

16. In regards to Claim 13, Boardman et al. teaches at least one of the upper and lower inclined sections (18, 20, Figure 2) are inclined in a plane manner (Column 4, Line 36-37).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman et al. (US Patent No. 5,492,223). Boardman et al. teaches the upper inclined contact surface (18, Figure 2) and the lower inclined contact surface (20, Figure 2) have a difference in angle limited to approximately 2-5 degrees (Column 4, Line 38-40).

Although not specifically identical in shape, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have identical shapes at the upper and lower contact portions as adversely taught by Boardman et al. (Column 4, Line 40-42).

19. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman et al. (US Patent No. 5,492,223) in view of Britt (US Patent No. 3,589,511). Boardman et al. fails to teach the inclined sections of the upper and lower contact sections inclined in such a curved manner that a gradient is downwardly moderate. Britt teaches a stackable tray (12, Figures 2) with upper and lower contact sections on the wall (peripheral edge) (38, Figure 8) that are inclined in a curved manner with a downwardly moderate gradient, which would have been obvious to one of ordinary skill at the time of the invention was made to provide for easy removal when the trays are stacked (Column 5, Line 31-42).

20. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman et al. (US Patent No. 5,492,223) in view of Cristy et al. (US Patent No. 3,695,424).

21. In regards to Claim 9, Boardman et al. fails to teach a protrusion different from the upper and lower contacts sections for engaging a chuck for catching the tray. Cristy et al. teaches a stackable substrate carrying tray (11, Figure 2) with an outer edge (14, Figure 1) with upper contact sections (15-18, Figure 3) and lower contact sections (20, 24-26, Figure 3) different from a protrusion (23, Figure 5). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have included a protrusion different from the upper and lower contact surface to Boardman et al.'s invention in order to allow for the stacked trays to be grasped by a chuck and separated from their nested relationship (Column 5, Line 2-5).

22. In regards to Claim 10, Boardman et al. fails to teach a protrusion for engaging a chuck, where the protrusion protrudes outwardly from an outer edge surface of the peripheral edge of the tray. Cristy et al. teaches a peripheral outer edge (14, Figure 1) (Column 2, Line 39-40). The outer edge (14) has a vertical section (18, Figure 3) in a plane manner from the horizontal. A protrusion (23, Figure 5) is provided on the outer edge (14), and upper contact sections (17-16, Figure 3) and lower contact sections (25, 26, Figure 3) are provided inwardly from the outer edge (14). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have included a protrusion on the outer edge of Boardman et al.'s invention in order to allow

for the stacked trays to be grasped by a chuck and separated from their nested relationship (Column 5, Line 2-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanton L. Krycinski whose telephone number is 571-270-5381. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly D. Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. L. K./

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Examiner, Art Unit 4174

/Kimberly D Nguyen/
Supervisory Patent Examiner, Art Unit 4174